

REMARKS

Applicant has added new claims 111-147.

In the office action dated August 23, 2004, the Examiner objected to the drawings as not showing the features of claims 7 and 27. Regarding claim 7, FIG. 2c shows the central pump engaging portion (200) of the feeding set. FIG. 3 shows an anti freeflow mechanism (300) which is attached to a connector (112) and disposed in the central pump engaging portion. Claim 27 has been amended to eliminate the reference to a diamond shaped cross section. Applicant therefore requests that the objection be withdrawn.

The Examiner also objected to the manner of reciting elements of claims 1 and 5. Applicant has amended these claims in accordance with the Examiner's suggestions, and requests that the objection be withdrawn.

The Examiner indicated that claims 7, 8, and 16-21 contain allowable subject matter. Applicant has amended claim 16 to contain all limitations found in the previous base claim and intervening claims. Applicant therefore requests that the Examiner allow claim 16 and dependent claims 17-21.

The Examiner also rejected claim 106 under 35 U.S.C. § 112 as failing to comply with the enabling requirement. The specification at paragraph 111 details how the sample cell may be constructed with a base portion 464. Paragraph 114 describes how the base portion is positioned to always allow some light through the sample cell, indicated by the lower dashed line in FIG. 6a. FIG. 6 shows the base portion having parallel side walls, in contrast to the angled side walls of the sample cell, and FIG. 6a shows a light ray (the lower dashed line) passing directly through the base portion. Since the base portion has parallel side walls and is oriented perpendicular to

the light rays, the light rays passing through the base portion are not refracted, but pass straight through the base. Applicant therefore respectfully requests that the Examiner withdraw the rejection.

Applicant has also amended the remaining claims to overcome the Examiner's double patenting and statutory rejections.

Claim 1 has been amended to include the limitation that the infusion set contain an optical pressure sensor. The prior art does not teach how to make an optical pressure sensor, nor provide motivation to place an optical pressure sensor in the infusion set. Applicant therefore requests that claim 1 be allowed, along with dependent claims 2-11 and 111-116. Claim 10 is independently patentable as it requires an optical pressure sensor comprising an emitter and detector for optically monitoring the pressure in the infusion set, which is not taught in the prior art. Claim 11 is also independently patentable as it requires at least one protrusion disposed on the central pump engaging portion to inhibit movement of the central portion when worked on by a pump which is not taught by the prior art.

Applicant has amended claim 22 to require the central portion of the infusion set have at least one protrusion to inhibit movement of the infusion set when it is worked on by a pump, and also requires that the infusion set have a sample cell for detecting bubbles which is formed as part of a connector. The prior art does not teach these claim elements. The cell 42 in the Kerwin patent is simply a drip chamber, but does not serve to detect bubbles. Applicant therefore requests that claim 22, and dependent claims 23-35, 95, and 96 be allowed.

Applicant has amended claim 92 to overcome the Examiner's rejections. The prior art does not teach a feeding set having a monitoring portion and an anti-freeflow mechanism disposed in the pump engaging portion of the feeding set at a fixed distance from a connector.

The Kerwin anti-freeflow mechanism is designed to change distances from the connector in order to allow or prevent flow. Applicant therefore requests that claim 92, and dependent claims 117-123 be allowed. Claims 120-123 are independently allowable as optical bubble detectors are not taught in the prior art.

Applicant has amended claim 93 to require that the feeding set have an inflow line, an outflow line, and a pump engaging portion, and that the pump engaging portion have at least one protrusion to limit movement of the pump engaging portion when worked upon by a pump. As these tubing sections and the protrusions are not taught by the prior art, applicant requests that claim 93 and dependent claims 94, 104-106, and 124-131 be allowed.

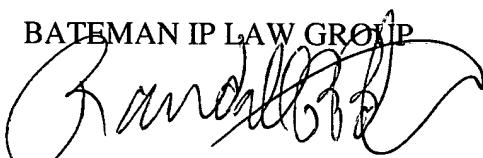
Claim 106 is independently allowable as it requires that a quantity of light pass through the sample cell without refraction, while much of the light is refracted, and is refracted differently due to the presence of air in the cell. This is not taught in the prior art. Claim 124 is independently allowable as it requires that the at least one projection be at least one annular ridge. Claim 127 is independently allowable because it requires that the sample cell be used in combination with an optical emitter and collector, and that more light be directed towards the detector when a bubble is present in the cell. Claim 128 is independently allowable in that it requires that the sample cell also direct some light to the optical detector regardless of the contents of the cell. The prior art cells will not direct any light towards the detector if the cell is full with an opaque fluid.

Applicant has amended claim 107 to include the limitation that the infusion set have at least one protrusion to inhibit movement of the infusion set when worked upon by a pump. This is not taught by the prior art. Applicant therefore requests that the Examiner allow claim 107 and

Applicant therefore believes that all of the claims are in condition for allowance and respectfully requests that the rejections be withdrawn. Should the Examiner determine that any additional action is necessary it is requested that he contact Applicant's counsel, Randall B. Bateman, at (801) 533-0320 so that such issues may be quickly resolved.

Sincerely,

BATEMAN IP LAW GROUP



Randall B. Bateman
Reg. No. 37,774
4 Triad Center, Suite 825
P.O. Box 1319
Salt Lake City, UT 84110

Tel. (801) 533-0320
Fax. (801) 533-0323

E-mail: rbb@utah-ip.com